

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

SMARTE CARTE INC. and CHARLES
E. BAIN,

No. 1:19-cv-08681-NLH-AMD

Plaintiffs,

v.

OPINION

INNOVATIVE VENDING SOLUTIONS,
LLC, and INNOVATIVE
STROLLERS, LLC,

Defendants.

INNOVATIVE VENDING SOLUTIONS,
LLC, and INNOVATIVE
STROLLERS, LLC,

Counterclaimants,

v.

SMARTE CARTE INC.,

Counterclaim Defendant.

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*On behalf of Defendants Innovative Vending Solutions, LLC
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HILLMAN, District Judge

This matter comes before the Court on the application for claim construction by Plaintiffs Smarte Carte Inc. ("Smarte Carte") and Charles E. Bain ("Plaintiff Bain") (collectively, "Plaintiffs") and Defendants Innovative Vending Solutions, LLC ("IVS") and Innovative Strollers, LLC (collectively, "Defendants"). The parties seek construction of five claim terms in U.S. Patent No. 7,434,674 (the "'674 Patent"), which involves a dispensing system for wheeled devices.

On April 24, 2020, the parties submitted their Joint Claim Construction and Prehearing Statement pursuant to Local Patent Rule 4.3. (ECF No. 73). The parties filed their opening briefs on June 16, 2020 (ECF Nos. 79, 80), and their responsive briefing on July 21, 2020 (ECF Nos. 85, 86). A Markman hearing was held on February 2, 2021. (See Minute Entry for proceedings, ECF No. 100; Transcript of Markman hearing, ECF No. 101). After careful consideration of the submissions by the parties and the record of the parties' arguments during the

Markman proceedings the Court construes the five disputed terms within the '674 Patent as set forth below.

BACKGROUND

Plaintiff Charles E. Bain invented a dispensing system for "wheeled devices" and received the '674 Patent for this invention on October 14, 2008. (ECF No. 1 at 3). On July 17, 2010, Plaintiff Bain entered into an exclusive license agreement with Nelson-Whitaker, Ltd. which was subsequently acquired by Plaintiff Smarte Carte. (Id.). Plaintiffs assert that Defendants have infringed the '674 patent through their commercial stroller dispensing system named "Zoomaroo." (Id.).

I. THE '674 PATENT & DISPUTED TERMS

A. The '674 Patent

The '674 Patent titled "Dispensing System for a Wheeled Device" created a system where customers could select a specific wheeled device that was individually locked and released with a latch at the front of the wheeled device and are stored perpendicular to an unmanned dispenser. (ECF No. 79 at 4).

The '674 Patent lists three independent claims: independent claims 1 and 8 are asserted in the instant case, as are dependent claims 2, 3, and 9-11. (Id. at 6).

The invention claimed is:

1. A dispensing system for at least one wheeled device comprising:

- a) a main raceway having a plurality of docking ports extending therefrom;
- b) the plurality of docking ports including at least a first docking port member and a second docking port member;
- c) the first docking port member and the second docking port member being similar in structure;
- d) the first docking port member having a receiving slot;
- e) the at least one wheeled device having a receiving latch secured thereto, in order to permit the at least one wheeled device to be attached to or removed from the dispensing system;
- f) the receiving slot accepting or releasing the receiving latch;
- g) the first docking port member having a push-back mechanism thereby permitting the receiving latch releasably contained to be removed from the docking port;
- h) a locking system being mounted in the first docking port member;
- i) the main raceway having a main arm and at least two branch arms;
- j) the at least two branch arms each having the locking system contained therein;
- k) the at least two branch arms providing a cart raceway for the main raceway;
- l) the cart raceway serving to guide the wheeled device into or out of the dispensing system;
- m) the main raceway being positionable in a plurality of shapes; and
- n) the plurality of shapes for the main raceway serving to vary the position for at least the first docking port member and the second docking port member.

2. The dispensing system of claim 1 further comprising:

- a) the main raceway having a main arm with each member of the at least two branch arms extending therefrom;
- b) the main arm having a control end;

- c) the control end having a control housing connected thereto; and
- d) the control housing including an operating means.

3. The dispensing system of claim 2 further comprising:

- a) the operating means including at least a first actuator button for the first docking port member and a second actuator button for the second docking port member,
- b) the first actuator button permitting release of a member of the at least one wheeled device from the first docking port member, and
- c) the control housing having the actuator button mounted therein along with a mechanical device or an electrical circuit to permit separation of the wheeled device from the at least two branch arms.

4. The dispensing system of claim 3 further comprising:

- a) a latch assembly to cooperate with the dispensing system mounted on the wheeled device;
- b) the latch assembly including a latch housing:
- c) the latch housing including mounting flanges at a mounting end, thereby permitting the latch housing to be attached to the wheeled device; and
- d) the receiving latch being oppositely disposed from the mounting flanges and being receivable by the docking port.

5. The dispensing system of claim 4 further comprising:

- a) the mounting flanges extending into a guide plate;
- b) the receiving latch including a locking aperture; and
- c) the guide plate being positioned between the mounting flanges and the receiving latch.

6. The dispensing system of claim 5 further comprising:

- a) at least the first actuator button for the first docking port member and the second actuation button for the second docking port member being operably connected to the docking port;
- b) the push-back device serving to separate the wheeled device from the docking port;
- c) the docking port including a Solenoid to operate a solenoid pin; and
- d) the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired.

7. The dispensing system of claim 6 further comprising:

- a) the main arm of the dispensing system and the at least two branch arms having docking ports on one or both sides of the raceway in order to facilitate convenient positioning of carts or to change the cart Volume within a given space; and
- b) the docking ports having from a top view thereof in at least one layout selected from the group consisting of a linear structure, an L-shape, a T-shape, and an angled shape.

8. A method of dispensing at least one wheeled device from a selected area comprising:

- a) providing a main raceway having a plurality of docking ports extending therefrom including at least a first docking port member and a second docking port member,
- b) providing a receiving slot for at least the first docking port member and the second docking port member,
- c) shaping the main raceway into a desired shape;
- d) providing a plurality of shapes for the raceway serving to position the plurality of docking ports;

- e) providing a receiving latch secured to at least the first docking port member and the second docking port member of the at least one wheeled device, in order to permit the at least one wheeled device to be attached to or removed from the receiving slot in at least the first docking port member or the second docking port member; and
- f) having the receiving slot cooperate with the receiving latch.

- 9. The method of claim 8 further comprising:
 - a) at least the first docking port member or the second docking port member of the plurality of docking ports having a push-back mechanism thereby permitting the receiving latch to be removed from the docking port;
 - b) a locking system being mounted in at least the first docking port member or the second docking port member of the plurality of docking ports;
 - c) the main raceway having a main arm and at least two branch arms;
 - d) at least the first docking port member or the second docking port member of the at least two branch arms having the locking system contained therein;
 - e) at least the first docking port member or the second docking port member of the at least two branch arms providing a cart raceway; and
 - f) the cart raceway serving to guide the wheeled device into or out of the dispensing system.
- 10. The method of claim 9 further comprising:
 - a) the main raceway having the main arm with at least the first docking port member or the second docking port member of the at least two branch arms extending therefrom;
 - b) the main arm having a control end;
 - c) the control end having a control housing connected thereto; and

d) the control housing including an operating means.

11. The method of claim 10 further comprising:
 - a) the operating means including an actuator button for at least the first docking port member or the second docking port member of the locking assembly;
 - b) the actuator button permitting release of the at least one wheeled device; and
 - c) the control housing having a set of actuator buttons mounted therein along with a mechanical device or an electrical circuit to permit separation of the wheeled device from the branch arm.
12. The method of claim 11 further comprising:
 - a) a latch assembly to cooperate with the dispensing system mounted on the wheeled device;
 - b) the latch assembly including a latch housing;
 - c) the latch housing including mounting flanges at a mounting end thereby permitting the latch assembly housing to be attached to the wheeled device; and
 - d) the receiving latch being oppositely disposed from the mounting flanges and being receivable by the docking port.
13. The method of claim 12 further comprising:
 - a) the mounting flanges extending into a guide plate;
 - b) the receiving latch including a locking aperture; and
 - c) the guide plate being between the mounting flanges and the receiving latch.
14. The method of claim 13 further comprising:
 - a) the actuator button including a first actuator button being operably connected to the first docking port member;
 - b) the push-back mechanism serving to separate the wheeled device from the first docking port member;

- c) the first docking port member including a solenoid to operate a solenoid pin; and
- d) the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired.

15. The method of claim 14 further comprising:

- a) the main arm of the dispensing system with each member of the at least two branch arms having at least first docking port member and the second docking member from one or both sides of the raceway in order to facilitate convenient positioning of carts or to change the cart volume within a given space; and
- b) the docking ports appearing from a top view in at least one layout selected from the group consisting of a linear structure, an L-shape, a T shape, and an angled shape.

16. A dispensing system for at least one wheeled device comprising:

- a) a main raceway having a plurality of docking ports extending therefrom;
- b) the plurality of docking ports including at least a first docking port member and a second docking port member;
- c) the first docking port member and the second docking port member being similar in structure;
- d) the first docking port member having a receiving slot;
- e) the at least one wheeled device having a receiving latch secured thereto, in order to permit the at least one wheeled device to be attached to or removed from the dispensing system;
- f) the receiving slot accepting or releasing the receiving latch;
- g) a control device providing access to at least the first docking port member or the second docking port member of the at least one wheeled device;
- h) the receiving slot accepting or releasing the receiving latch;

- i) the first docking port member having a pushback mechanism thereby permitting the receiving latch releasably contained to be removed from the docking port;
- j) a locking system being mounted in the first docking port member;
- k) the main raceway having a main arm and at least two branch arms;
- l) the at least two branch arms having the locking system contained therein;
- m) the first docking port member or the second docking port member of the at least two branch arms providing a cart raceway;
- n) the cart raceway serving to guide the wheeled device into or out of the dispensing system;
- o) the main raceway having the main arm with the at least two branch arms extending therefrom;
- p) the main arm having a control end;
- q) the control end having a control housing connected thereto; and
- r) the control housing including an operating means.

17. The dispensing system of claim 16 further comprising:

- a) the operating means including an actuator button for the locking assembly;
- b) the actuator button permitting release of a member of the at least one wheeled device from the locking assembly;
- c) the control housing having a set of actuator buttons mounted therein along with a mechanical device or an electrical circuit to permit separation of the wheeled device from a branch arm;
- d) a latch assembly to cooperate with the dispensing system mounted on the wheeled device;
- e) the latch assembly including a latch housing;
- f) the latch housing including mounting flanges at a mounting end thereby permitting the latch assembly housing to be attached to the wheeled device; and

g) the receiving latch being oppositely disposed from the mounting flanges and being receivable by the docking port.

18. The dispensing system of claim 17 further comprising:

- a) the mounting flanges extending into a guide plate;
- b) the receiving latch including a locking aperture;
- c) the guide plate being between the mounting flanges and the receiving latch;
- d) the actuator button being operably connected to the first docking port member,
- e) the push-back device serving to separate the wheeled device from the first docking port member;
- f) the first docking port member including a solenoid to operate a solenoid pin;
- g) the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired;
- h) the main arm of the dispensing system with each member of the at least two branch arms having docking ports from one or both sides of the raceway in order to facilitate convenient positioning of carts or to change the cart volume within a given space; and
- i) the main raceway having at least one layout selected from the group consisting of a linear shape, an L-shape, a T shape, and an angled shape.

(ECF No. 79-2 at 17-19, '674 Patent).

B. Terms in Dispute

The parties ask the Court to settle the dispute regarding the construction of five terms:

<u>Claim Term</u>	<u>Plaintiffs' Construction</u>	<u>Defendants' Construction</u>
"Receiving latch"	A "bar or connector."	"A structure having a locking aperture into which a strike plate of the locking system can enter or leave."
"Locking system"	Plain and ordinary meaning, but if construction is required, "locking mechanism" or "locking assembly."	"A device having a solenoid and a strike plate, where the solenoid activates the strike plate to enter or leave a locking aperture."
"Push-back mechanism"	A "spring-loaded mechanism."	"A spring loaded mechanism for ejecting the wheel device a short distance from the docking port."
"Branch arm(s) "	Plain and ordinary meaning, but if construction is required, "docking station."	"Portions of the main raceway extending outward from the main arm."
"Cart raceway"	Plain and ordinary meaning, but if construction is required, "cart guide."	Indefinite; otherwise, "a space created by the branch arms."

(ECF No. 73 at Amended Ex. A) .

II. LEGAL STANDARD

The ultimate question of the proper construction of a claim in a patent is a question of law for the court to determine. Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 325 (2015) (citing Markman v. Westview Instruments, Inc., 517 U.S. 370, 388-91 (1996) (explaining, “[w]hile we held in Markman that the ultimate issue of the proper construction of a claim should be treated as a question of law, we also recognized that in patent construction, subsidiary factfinding is sometimes necessary.”)). A patent claim is that “portion of the patent document that defines the scope of the patentee’s rights.” Id. at 321 (quoting Markman, 517 U.S. at 372).

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal citation and quotation marks omitted). “[T]here is no magic formula or catechism for conducting claim construction.” Id. at 1324. Instead, the Court is free to attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” Id. (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “Claim construction begins with the intrinsic evidence of the patent—the claims, the specification, and the prosecution history—and may require

consultation of extrinsic evidence to understand the state of the art during the relevant time period.” Merck Sharp & Dohme Corp. v. Teva Pharms. USA, Inc., No. 17-6921, 2019 WL 943532 at *2 (D.N.J. Feb. 26, 2019); see also Phillips, 415 F.3d at 1314-17.

The Federal Circuit has set forth an approach to claim construction. In re Papst Licensing Digital Camera Patent Litigation, 778 F.3d 1255, 1261 (Fed. Cir. 2015). In construing a patent claim, it should be considered in the mindset of a person having ordinary skill in the art (“POSITA”), and:

- (1) a court should give words of a claim their ordinary meaning in the context of the claim and the whole patent document;
- (2) the specification particularly, but also the prosecution history, informs the determination of claim meaning in context, including by resolving ambiguities;
- (3) even if the meaning is plain on the face of the claim language, the patentee can, by acting with sufficient clarity, disclaim such a plain meaning or prescribe a special definition; and
- (4) the court should apply the principle that “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.”

In re Papst, 778 F.3d at 1261 (citing Phillips, 415 F.3d at 1312-17 (explaining that claim terms should be given their

ordinary and customary meaning to a person having ordinary skill in the art at the time of the effective date of the patent application)).

To expand upon the above outlined approach, first, the court “looks to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention.” Vitronics Corp., 90 F.3d at 1582. The “words of a claim ‘are generally given their ordinary and customary meaning,’” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” Phillips, 415 F.3d. at 1312-13 (quoting Vitronics Corp., 90 F.3d at 1582).

A POSITA “is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” Id. at 1313 (citing Multi-form Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998)).

Accordingly, “the claims themselves provide substantial guidance as to the meaning of particular claim terms,” and a court may look to “the context in which a term is used in the asserted claim” and “other claims of the patent in question, both asserted and unasserted.” See id. at 1314.

Second, the specification is "always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." Vitronics Corp., 90 F.3d at 1582; see also Phillips, 415 F.3d at 1315 (noting that claims "are part of 'a fully integrated written instrument,' and 'must be read in view of the specification, of which they are a part'" (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 978-79 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996))). "Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history." Vitronics Corp., 90 F.3d at 1582.

However, while "[t]he written description and other parts of the specification [] may shed contextual light on the plain and ordinary meaning [], they cannot be used to narrow a claim term to deviate from the plain and ordinary meaning unless the inventor acted as his own lexicographer or intentionally disclaimed or disavowed claim scope." Aventis Pharms. Inc. v. Amino Chemicals Ltd., 715 F.3d 1363, 1373 (Fed. Cir. 2013).

Third, a court "should also consider the patent's prosecution history, if it is in evidence." Markman, 52 F.3d at

980. "This history contains the complete record of all the proceedings before the Patent and Trademark Office [("PTO")], including any express representations made by the applicant regarding the scope of the claims." Vitronics Corp., 90 F.3d at 1582. "A patent's prosecution history, though less useful for claim construction purposes than the claim language and written description, plays various roles in resolving uncertainties about claim scope." Mass. Inst. of Tech. v. Shire Pharms., Inc., 839 F.3d 1111, 1118 (Fed. Cir. 2016) (internal quotation marks and citations omitted). The prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention. Phillips, 415 F.3d at 1317. For example, the prosecution history may "limit[] the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution." Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995) (citation omitted).

The doctrine of prosecution disclaimer attaches when a patentee unequivocally disavows a certain meaning to obtain his or her patent. Novartis Corp. v. Teva Pharms. USA, Inc., 565 F. Supp. 2d 595, 605 (D.N.J. Jul. 16, 2018). When the doctrine attaches, it narrows the ordinary meaning of the claim consistent with the scope of the surrender. *Id.* For example, an applicant may limit the scope of a proposed claim in the

process of distinguishing their invention over prior art to overcome an examiner's rejection and obtain a patent. "When an applicant surrenders or disclaims subject matter in this manner, the disclaimer becomes part of the prosecution history. If the application ultimately issues as a patent, the patent holder is bound by his or her prior disclaimers." Id. citing Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1378 (Fed. Cir. 1998). The prosecution history and the application of a disclaimer can be a useful tool during claim construction because it can "ensure[] that claims are not construed one way in order to obtain their allowance and in a different way against accused infringers." Id. (citing Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005)).

However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317.

Finally, in some cases, the "district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." Teva Pharms. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 331 (2015). "Extrinsic evidence

consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Markman, 52 F.3d at 980.

However, “[i]n those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper.” Vitronics Corp., 90 F.3d at 1583. “When an analysis of intrinsic evidence resolves any ambiguity in a disputed claim term, it is improper to rely on extrinsic evidence to contradict the meaning so ascertained.” Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1367 (Fed. Cir. 2003) (emphasis in original). “Extrinsic evidence [] cannot be used to alter a claim construction dictated by a proper analysis of the intrinsic evidence.” On-Line Tech. v. Bodenseewerk Perkin-Elmer, 386 F.3d 1133, 1139 (Fed. Cir. 2004) (citations omitted).

III. CONSTRUCTION OF THE CLAIM TERMS

Plaintiffs generally assert that the contested terms are in no need of construction and that a factfinder would be able to reasonably understand the terms as is. (ECF No. 79 at 1). Plaintiffs believe that Defendants’ proposed constructions read in limitations from other, dependent claims and the preferred embodiment. (Id. 1-2). Plaintiffs also argue that the expert testimony provided by Defendants’ expert is not reliable and should not be considered because the expert is “merely

parroting” Defendants’ litigation positions without sufficient support. (ECF No. 86 at 30).

Defendants broadly argue that Plaintiff Bain, the inventor of the ’674 Patent, narrowed the scope of several terms such as “locking system” and “receiving latch” during the prosecution of the ’674 Patent to the specific embodiment disclosed in the ’674 Patent to overcome claim rejections based on prior art that was encompassed by the plain and ordinary meanings of the contested terms. (ECF No. 80 at 2). Defendants also assert that a POSITA would interpret the contested terms with additional descriptors derived from the context provided by the specification, claim language, and prosecution history, rather than the more limited construction offered by Plaintiffs. (Id. at 2).

A. Person Having Ordinary Skill in the Art

At the outset, the Court must define a POSITA under these circumstances. “Thus, before the Court reviews the bounds of the claims in light of the specification, it must establish the level of skill that a [POSITA] possessed at the time of the invention.” Supernus Pharms., Inc. v. Actavis, Inc., No. 14-06102, 2016 WL 901837, at *2 (D.N.J. Mar. 9, 2016) (citing AllVoice Comput. PLC v. Nuance Commc’ns, Inc., 504 F.3d 1236, 1240 (Fed. Cir. 2007)). The Court accepts, without objection from Plaintiff, Defendants proposed definition:

A POSITA with respect to the '674 Patent would have a bachelor's degree in mechanical engineering and two or more years' experience designing mechanical or electro-mechanical mechanisms or a person without such degree but having five or more years of equivalent experience.

(ECF No. 80 at 2 n.2).

B. Expert Testimony

Defendants offered the testimony of Dr. Novak as a POSITA in this matter. Plaintiffs consented during the Markman hearing, while reserving all other objections, that Dr. Novak was qualified as an expert with the appropriate background to opine on the '674 Patent for the purpose of the hearing only. (ECF No. 101 at 96:2-11).

Defendants assert that Dr. Novak's testimony is important because it is the only proffered evidence of what a POSITA can glean from Plaintiff Bain's specification, claims, and prosecution history and is valid extrinsic evidence. (ECF No. 105 at 4). Defendants also note that investor testimony, on which Plaintiffs heavily rely, is afforded less weight than expert testimony. (Id. at 5 n.5) (citing Homedica Osteonics Corp. v. Wright Med. Tech. Inc., 540 F.3d 1337, 1347 (Fed. Cir. 2008)). Plaintiffs declined their opportunity to depose Dr. Novak in July of 2020 but did cross-examine him at the Markman hearing (where the Court also questioned him). (Id. at 5).

Plaintiffs assert that Dr. Novak's testimony simply "parrots" the litigation positions of Defendants and that because the intrinsic evidence is sufficient to construe the terms at issue the Court should not rely on the extrinsic evidence of Dr. Novak's testimony, which they further assert is at odds with the intrinsic evidence. (ECF No. 104 at 5) (citing Finjan, Inc. v. Cisco Sys., Nos. 2019-2074, -2146, 2020 U.S. App. LEXIS 40793 at *13-14 (Fed. Cir. Dec. 30, 2020)). Plaintiffs also objected to Dr. Novak's testimony for going beyond the scope of his declaration as provided with Defendants' Markman Brief. (ECF No. 101 at 80:20-25).

The Court now turns to the five disputed terms.

C. Claim Terms

1. Receiving Latch

<u>Claim Term</u>	<u>Plaintiffs' Construction</u>	<u>Defendants' Construction</u>
"Receiving latch"	A "bar or connector."	"A structure having a locking aperture into which a strike plate of the locking system can enter or leave."

a. Parties' Positions

i. Plaintiffs' Position

Plaintiffs first propose that the claim language as is “clearly inform[s] one of skill in the art that the receiving latch is secured to the stroller . . . for the dual purposes of attachment and removal.” (ECF No. 79 at 12). Plaintiffs state that the claim language teaches that the receiving latch “mates” with a receiving slot and that a “bar or connector” is secured to the wheeled device to create the dispensing system. (Id.). Plaintiffs argue that Defendants’ proposed construction utilizes phrases such as “locking aperture” from non-asserted, dependent claims to impermissibly narrow the construction of the independent claims, for example, from dependent claims 5 and 13 which explicitly require the receiving latch have a “locking aperture.” (Id. at 12-13). Plaintiffs argue that incorporating these phrases would impermissibly limit the claims to features disclosed in the preferred embodiment. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 913 (Fed. Cir. 2004).

Plaintiffs point to the specification that describes a bar, and no additional mechanisms, to further support the simple construction of “a bar or a receiving latch” as the most appropriate construction. (Id. at 14). This construction is important because it makes clear by way of the specification and figures that the bar or receiving latch is designed to connect the wheeled device to the dispensing system, creating the unique design that differentiated the invention from nesting and wheel

locking systems represented in prior art. (Id.). In U.S. Patent No. 6,149,370 ("DiBartolomeo"), the figures show, and the claims describe, a "receiving latch" as a bar. (Id. at 16).

Plaintiffs also cite to extrinsic evidence to support their position, pointing to dictionary definitions that define "latch" to include a bar or connector, noting that no definitions include a "locking aperture," and that a fairly recent court case defined "latch" as a "bar or projection that holds something in place by entering a notch or cavity." (Id. at 16-17) (citing Genes Industry Inc. v. Custom Blinds and Components Inc., No. 8-15-00476, Dkt. 34 at 10-12 (C.D. Cal. 2016)).

ii. Defendants' Position

Defendants' primary argument is that Plaintiff Bain, as the inventor of the '674 Patent, disclaimed the plain and ordinary meaning of "receiving latch" during the prosecution of the '674 Patent to overcome prior art. (ECF No. 80 at 28); see also (ECF No. 79 at 161-64 of 294, Bates No. SC000119 - SC000122).

Defendants argue that in overcoming the DiBartolomeo patent Plaintiff Bain differentiated his receiving latch from DiBartolomeo's structure of a cart-mounted pin or bar in its locking mechanism. (ECF No. 80 at 31). The receiving latch is represented as (156) in Figure 10 of the '674 Patent, which Defendants assert is the only embodiment of any receiving latch in the '674 Patent, and its specification describes the

inclusion of a solenoid pin and strike plate entering or leaving a locking aperture. (Id. at 34-35). This embodiment was used to differentiate DiBartolomeo's teachings with regards to the dispensing system that utilizes a pivoting latch member or bar connected to the wheeled device. (Id. at 36). Defendants assert that Plaintiff Bain argued that these structures were "vital" and "significant," which would limit the claim terms from the perspective of a POSITA. (Id. at 38-39). Therefore, Defendants argue that their proposed construction closely tracks the specifications in light of the broader claim construction being disavowed by Plaintiff Bain in prosecution.

iii. Plaintiffs' Response

Plaintiffs note that the disagreement regarding disclaimer is pivotal to this term's construction and denies one occurred during the '674 Patent's prosecution. (ECF No. 86 at 3,6). Moreover, Plaintiffs argue that the preferred embodiment is not controlling, that the entire specification does not provide for express definitions, and that the specification explicitly acknowledges other configurations for a receiving latch. (Id. at 3, 5). Plaintiffs note that prosecution history is not a favored method for claim construction purposes. (Id. at 6); 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1326 (Fed. Cir. 2013) (citing Netcraft Corp. v. eBay, Inc., 549 F.3d 1394, 1401 (Fed. Cir. 2008)) ("Our cases also warn that, because

the prosecution history represents an ongoing negotiation between the PTO and the inventor, 'it often lacks the clarity of the specification and thus is less useful for claim construction purposes.'").

Plaintiffs explain that the Examiner misapplied previous art, and that the clarification Plaintiff Bain gave to explain the invention was not a disclaimer because the prior art was inapplicable in the first place. (Id. at 8). For example, U.S. Patent No. 6,447,236 ("Grams") teaches capture via wheels, in comparison to the '674 Patent's receiving latch and slot configuration. (Id. at 8-9). Plaintiffs assert that the "vital structures" that Plaintiff Bain claimed in prosecution are the receiving slot, latch, and the function of the receiving slot accepting and receiving the latch independent of any wheel capture, not the locking aperture that Defendants focus on. (Id. at 9-10).

iv. Defendants' Response

Defendants reassert their argument that Plaintiff Bain limited the scope of the '674 Patent with regards to the receiving latch via disclaimer. Defendants argue that Plaintiff Bain intended to exclude a prior patent's structure (DiBartolomeo) when, in both Plaintiffs' Markman Brief and in the prosecution history, the receiving latch is distinguished

from DiBartolomeo by not having an aperture. (ECF No. 85 at 14-15).

v. Plaintiffs' Post Hearing Letter¹

Plaintiffs insist that Defendants' assertion of disclaimer does not rebut the presumption against limiting broader claims per the doctrine of claim differentiation because Plaintiff Bain not only distinguishes his invention from prior art on multiple bases, but because his statements are not so unequivocal that his statements are not amenable to any other reasonable interpretation. (ECF No. 104 at 2). Plaintiffs assert that Defendants' interpretation of the prosecution history is incorrect, and that the "vital structures" that Plaintiff Bain used to differentiate his invention from prior art relates to the receiving latch being the sole connection between the wheeled device in the docking port. (Id. at 3). Because this argument alone was enough to support the Examiner's withdrawal of the rejection, "there can be no disclaimer related to the receiving latch as a matter of law." (Id. at 4) (citing Eolas Techs. Inc. v. Microsoft Corp., 399 F.3d 1325, 1337 (Fed. Cir. 2005)).

vi. Defendants' Post Hearing Letter

¹ To the extent that the Post Hearing Letters present arguments made in prior briefing, the Court does not repeat them in this Opinion.

Defendants assert that even if Plaintiff Bain's statements about the aperture and other parts of the receiving latch and locking system were not the dispositive or sole reason for the Examiner's withdrawal, the '674 Patent's claims may still be properly limited by incorporating prosecution disclaimers even if the disclaimers were unnecessary. (ECF No. 105 at 1) (citing Technology Properties Ltd. LLC v. Huawei Technologies Co., Ltd., 849 F.3d 1349, 1359 (Fed. Cir. 2017) ("[T]he scope of surrender is not limited to what is absolutely necessary to avoid a prior art reference; patentees may surrender more than necessary. When this happens, we hold patentees to the actual arguments made, not the arguments that could have been made.")).

Defendants argue that Plaintiffs are bound by the "totality of [Plaintiff] Bain's arguments to the USPTO." (Id. at 1) (citing Sumitomo Dainippon Pharma Co. v. Emcure Pharms. Ltd., No. 18-2065, 2018 U.S. Dist. LEXIS 173633 at *49-56 (D.N.J. Oct. 5, 2018)).

b. Discussion

The Court finds that, for the reasons articulated below as applied to claim-term 1, the plain and ordinary meaning of the claim-term would be readily accessible to a POSITA, and no further construction is warranted.

First, when at all possible, the words of a claim "are generally given their ordinary and customary meaning."

Vitronics, 90 F.3d at 1582. "Receiving latch" is consistently used throughout the '674 Patent, through the abstract, preferred embodiment, and the claim language, to describe the connection between the wheeled device and the dispensing system with the function of releasing or accepting the wheeled device to the docking port. See (ECF No. 79 at 43, 55-59), (Bates No. SC000002, SC000014-18). The context of the entire '674 Patent affirms that the "receiving latch" is exactly that: a connection that can fasten and unfasten an object to another.

The asserted claims 1, 8, and 9 utilize the broad, contested term "receiving latch," and nonasserted, dependent claims such as 5 and 13, specify that the receiving latch include a "locking aperture." As Plaintiffs noted, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." Phillips, 415 F.3d at 1314-15. While this is a rebuttable presumption, it weighs in favor of Plaintiffs' construction.

The specification also supports the plain meaning of the term, and there are no ambiguities related to the claim meaning in context with the overall '674 Patent. The specification is "[u]sually . . . dispositive; it is the single best guide to the meaning of a disputed term." Vitronics Corp., 90 F.3d at 1582; see also Phillips, 415 F.3d at 1315. The Court does not read

the specification to indicate that Plaintiff Bain was attempting to be his own lexicographer with regards to this term, and so weighs this element in favor of Plaintiffs' construction.

However, even if the meaning of a term is plain on the face of the claim language, a patentee can disclaim the term or give it a special definition, which would then control. Phillips, 415 F.3d at 1316. Plaintiffs assert that the '674 Patent as granted does not support any narrowed constructions, and that the argument to narrow claim terms 1 and 2 rests solely on whether Plaintiff Bain's statements during the patent prosecution "unequivocally disavowed a certain meaning" for the invention to receive a patent. (ECF No. 104 at 1).

"[F]or prosecution disclaimer to attach, . . . the alleged disavowing actions or statements made during prosecution [must] be both clear and unmistakable." Omega Eng'g., Inc. v. Raytek Corp., 334 F.3d 1314, 1325-26 (Fed. Cir. 2003). It is required that "the alleged disavowing statements [are] both so clear as to show reasonable clarity and deliberateness," and "so unmistakable as to be unambiguous evidence of disclaimer." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1325 (Fed. Cir. 2003) (citations omitted).

Here, the alleged disclaimer is within four pages of the prosecution history where Plaintiff Bain overcomes the Examiner's rejection over prior art (Grams, DiBartolomeo). (ECF

No. 79 at 100-103) (Bates Nos. SC000119-122). This section is cited as a disclaimer for both claim term 1 and claim term 2, and in this section the Court will focus on the alleged disclaimer of "receiving latch".

The prosecution history discussing Grams does not disclaim the "receiving latch" claim term. The Examiner rejected Claims 21, 29, and 37 as unpatentable over Grams in view of prior art. (Id. at 100) (Bates No. SC000119). Plaintiff Bain pointed to the receiving latch as a structure that made his invention "significantly different" from Grams in that the receiving latch and receiving slot were not connected to the cart wheel and did not serve to accept or release the cart by a wheel catching plate or stopper, rather, the receiving latch and slot in Plaintiff Bain's invention were the "vital structures" providing "connection between the wheeled device and the docking port[.]" (Id.) (Bates No. SC000119). Plaintiff Bain further describes that the "latch assembly" contained the "receiving latch" which matched with each "docking port" having a "receiving slot," allowing for the wheeled device to be locked in position by said latch and not the wheel as taught by Grams. (Id. at 101) (Bates No. SC000120). The receiving latch is the primary structure that defines Plaintiff Bain's invention against Grams and is used specifically to differentiate his invention in relation to Grams' wheel locking system. (Id. at 100-103) (Bates Nos.

SC000119-122). This portion of the prosecution history does not “clearly” or “unambiguously” disclaim the “receiving latch” claim term. If anything, it reaffirms the Plaintiffs’ construction of the term as its ordinary and customary meaning.

The prosecution history discussing DiBartolomeo similarly does not disclaim the “receiving latch” claim term. The second part of the alleged disclaimer relates to how Plaintiff Bain traverses DiBartolomeo. (Id. at 102-03) (Bates Nos. SC000121-22). This section begins with Plaintiff Bain asserting that the “applicant discloses a receiving latch (156) which inserts into a receiving slot on docking port (180).” (Id. at 102) (Bates No. SC000121). Then Plaintiff Bain continued, “[a]pplicant does disclose a device in which a solenoid (184) is present. Applicant’s solenoid (184) has a solenoid pin (186) which operates a strike plate (188) and permits the strike plate (188) to enter or leave the locking aperture (158). Thus, applicant’s ‘pushback system’ has significant structural differences from DiBartolomeo.” (Id. at 103) (Bates No. SC000122). Defendants urge the Court to interpret the paragraph above as “clearly and unambiguously” disclaiming the broader term “receiving latch” and utilize a version of Plaintiff Bain’s description in the above paragraph: “a structure having a locking aperture into which a strike plate of the locking system can enter or leave.” (ECF No. 80 at 6).

First, the DiBartolomeo discussion reads overall as an explanation of the invention; there does not appear to be any clear intent to redefine or amend the claim terms. Second, while the beginning of the paragraph orients the Examiner to the receiving latch and slot, the rest of the paragraph appears to describe the specifics of the locking system, going into detail to point out how the solenoid is of the type with a pin and strike plate combination that enables the "locking" function with the locking aperture. Critically, the final sentence of that paragraph seems to note that the description of the solenoid demonstrates the "significant structural differences" of the push-back system vis-à-vis DiBartolomeo. (Id.) (Bates No. SC000122).

Given the line-by-line analysis of the alleged disclaimer, the Court finds that the paragraph discussing DiBarolomeo is far from "unambiguous" and "clear." Indeed, it seems that the description above could be in reference to the "locking system" or to the "push-back mechanism," and is not in reference to the general "receiving latch" claim term, where those specific sub-parts of the invention are found. This is supported by the content of the asserted and non-asserted claims. Compare independent claim 1 (e)-(h) ("1. A dispensing system for at least one wheeled device comprising: . . . (e) the at least one wheeled device having a receiving latch secured thereto, in

order to permit the at least one wheeled device to be attached to or removed from the dispensing system; (f) the receiving slot accepting or releasing the receiving latch; (g) the first docking port member having a push-back mechanism thereby permitting the receiving latch releasably contained to be removed from the docking port; (h) a locking system being mounted in the first docking port member;"); to dependent claim 5(b) and dependent claim 6(b)-(d) ("5. The dispensing system of claim 4 further comprising: . . . (b) the receiving latch including a locking aperture; and . . . 6. The dispensing system of claim 5 further comprising: . . . (b) the push-back device serving to separate the wheeled device from the docking port; (c) the docking port including a solenoid to operate a solenoid pin; and (d) the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired.").

From the claims above, Plaintiff Bain's discussion of DiBartolomeo serves as an explanation that the solenoid pin and strike plate appear to be part of the docking port, and the aperture as part of the receiving latch, to form the "locking system" that distinguishes the '674 Patent from Bartolomeo, which also uses a solenoid in its cart docking system. (ECF No. 104 at 4); see also (ECF No. 79 at 242) (the "Detailed Description of the Invention" of Bartolomeo). The Examiner

explicitly rejected claims relating to a "locking configuration" in relation to Bartolomeo based on its "teaching a dispensing system comprising a locking assembly that includes a pushback mechanism 222 that removes receiving latch 510 from docking port 210 (see Figures 1, 2 and 5) for the purpose of selectively removing wheeled devices 104 from the dispenser." (ECF No. 79 at 135) (Bates No. 000093).² The Examiner put Plaintiff Bain on notice that the locking system, and not the receiving latch specifically, was the issue for Plaintiff Bain to overcome. Plaintiff Bain overcame that rejection by explaining the locking system's "vital structures" of a solenoid with a pin and strike plate rather than a solenoid interconnected to a pivoting latch member or bar. (Id. at 243). An explanation is not the same as a disclaimer: there is no clear intent present in the explanation suggesting that Plaintiff Bain was amending or giving up any claims as described in the '674 Patent. Therefore, the statements made by Plaintiff Bain during prosecution as it relates to the "receiving latch" are not so clear and unambiguous for the doctrine of prosecution disclaimer to attach.

"In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In

² In Figure 5, DiBartolomeo shows a receiving latch (510) as a bar that is captured by a notch (304). (ECF No. 79 at 22).

such circumstances, it is improper to rely on extrinsic evidence.” Vitronics, 90 F.3d at 1583. Therefore, the Court will not consider any of the extrinsic evidence presented by both sides related to this claim, as the intrinsic evidence is sufficient to determine that “receiving latch” should be constructed pursuant to its ordinary meaning.

As instructed in previous decisions, the Court should apply the principle that “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” In re Papst, 778 F.3d at 1261 (citing Phillips, 415 F.3d at 1312-17). The Court concludes that Plaintiffs’ construction is most consistent with the claim-terms themselves, the language within the specification, and the invention as a whole, and rejects Defendants proposed addition of “[a] structure having a locking aperture into which a strike plate of the locking system can enter or leave.” as adding an additional limitation not otherwise specified or intended by the inventor. (See ECF No. 80 at 6).

2. Locking System

<u>Claim Term</u>	<u>Plaintiffs’ Construction</u>	<u>Defendants’ Construction</u>
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"Locking system"	Plain and ordinary meaning, but if construction is required, "locking mechanism" or "locking assembly."	"A device having a solenoid and a strike plate, where the solenoid activates the strike plate to enter or leave a locking aperture."
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a. Parties' Positions

i. Plaintiffs' Position

Plaintiffs argue that "locking system" does not require any construction and can be left to its plain and ordinary meaning. (ECF No. 79 at 18). The claim language specifies that the locks must be located at the docking ports to allow attachment and release from the dispensing system. (Id.). The '674 Patent includes language to cover different types of locks per a POSITA. (Id.).

Similar to the first construction, Plaintiffs argue that Defendants are trying to insert dependent, limiting descriptors into the independent claims. (Id.). Plaintiffs point out that "solenoid and a strike plate" descriptors that are present in non-asserted, dependent claims 6 and 14, and such construction would violate claim differentiation principles. (Id. at 18-19) (citing Liebel-Flarsheim, 358 F.3d at 909-10; see also Cioffi v. Google, Inc., 632 F. App'x 1013, 1018-19 (Fed. Cir. 2015); GE Lighting, 750 F.3d 1304, 1310 (Fed. Cir. 2014)).

The specification uses the terms “locking assembly” and “locking system” interchangeably, and even the preferred embodiment gives a broad description of the locking device without using the Defendants’ proposed terms. (Id. at 19).

Finally, Plaintiffs point to several pieces of extrinsic evidence to support their position. First, Plaintiffs note that prior to this lawsuit, Defendants described a “locking mechanism” without using their proposed additional terms of “solenoid” and “strike plate.” (Id. at 20). This comports with the dictionary definition of “lock” which does not include those additional terms. (Id.) (citing Random House Webster’s College Dictionary, 780-81 (2d ed. 2001)).

ii. Defendants’ Position

Defendants argue that the Examiner found the plain and ordinary meaning of “locking system” to read on the prior art, and during prosecution Plaintiff Bain was able to distinguish his invention by pointing to the particular structures disclosed in the specification and therefore disclaiming the broader construction. (ECF No. 80 at 29, 30, 35-39) (citing Omega Eng’g., Inc. v. Raytek Corp., 334 F.3d 1314, 1323-24 (Fed. Cir. 2003) (noting that “[t]he doctrine of prosecution disclaimer is well established in Supreme Court precedent, precluding patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution”)).

Defendants argue that Plaintiffs' alternative construction, "locking assembly" is refuted by the language of the '674 Patent because the "locking system" structure is narrower than the "locking assembly" as described in claims 1, 9, and 16. (Id. at 31-32).

iii. Plaintiffs' Response

Plaintiffs assert the same arguments against any purported disclaimer for the construction of "locking system" as for the "receiving latch." (ECF No. 86 at 13). Further, Plaintiffs believe that in the alleged disclaimer, the term that is referenced is the "push-back system" and not the locking system as Defendants propose. (Id. at 14). While Plaintiff Bain did discuss the solenoid and strike plate as part of the locking system during the prosecution of the '674 Patent, Plaintiffs assert that the full context of the discussion with the Examiner was about the capturing of cart wheels and the push-back mechanism not being spring-loaded in Bartolomeo, and not the contested term. (Id. at 16). In any event, the Plaintiffs argue that the prosecution does not contain any "clear and unmistakable" disclaimers. 3M Innovative Props., 725 F.3d at 1326 (rejecting prosecution disclaimer arguments because of ambiguous statements). (Id.). Finally, Plaintiffs assert that acknowledging similarities in prior art is not a disclaimer.

(Id. at 17) (citing ACQIS, LLC v. EMC Corp., No. 14-cv-13560, 2017 U.S. Dist. LEXIS 202160 at *14 (D. Mass. Dec. 8, 2017)).

Plaintiffs point to the entire specification to demonstrate that there was no intent to narrow the definition of “locking system” to solely the bounds of the preferred embodiment, noting that the ‘674 Patent itself describes the solenoid and strike plate set up as “one manner of operations,” suggesting that there are other methods of locking wheeled devices that the ‘674 Patent anticipated to cover. (Id. at 18). Plaintiffs also assert that the terms “locking system” and “locking assembly” are interchangeable because they were used that way by the inventor and are not hierarchical terms. (Id. at 20). Ultimately, the Plaintiffs believe that further defining the term is unnecessary because the factfinder can understand that the term “locking system” is about the function of locking and unlocking on its face. (Id. at 21).

iv. Defendants’ Response

Defendants argue that Plaintiffs’ arguments are wrong as a matter of law and are just attempts to recapture claim scope that was surrendered to overcome prior art. (ECF No. 85 at 12). Moreover, Defendants assert that Plaintiffs are “conjuring up multiple embodiments out of thin air” when the ‘674 Patent does not contain any other embodiment other than the preferred embodiment. (Id. at 13 n.4). Defendants note that there was

"extensive" discussion of the term "locking system" in the prosecution history which indicates that the term should require construction. (Id. at 12).

v. Plaintiffs' Post Hearing Letter

Plaintiffs address that Plaintiff Bain did not and could not distinguish the '674 Patent from the DiBartolomeo patent via a disclaimer of the locking system because both Plaintiff Bain's invention and the DiBartolomeo patent include solenoids. (ECF No. 104 at 4). Plaintiffs assert that the passage Defendants argue is a disclaimer for the locking system is actually related to the push-back mechanism and therefore cannot be a disclaimer of the locking system. (Id. at 4-5).

b. Discussion

The Court finds that, for the reasons articulated below as applied to claim-term 2, the plain and ordinary meaning of the claim term would be readily accessible to a POSITA, and no further construction is warranted.

"The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." Phillips, 415 F.3d at 1313. The "locking system" term can be found in claims 1 and 9

and does not appear in the specification.³ (ECF No. 105 at 2). According to Plaintiffs, "locking system" and "locking assembly" are used interchangeably by the inventor to represent the group of potential sub-structures that enable the wheeled device to be released and attached to the docking ports. (ECF No. 79 at 18). Given the ambiguity that arises from using the term "locking system" in the independent claims and the term "locking assembly" in the specification, the Court does not find the comparison between the claims and specification dispositive of the claim term meaning on its face.

Further, the independent claims' language is sparse in describing the locking system, and only requires that the locks of the system be located on the docking port. (ECF No. 79 at 18-19, 57-58) (Bates Nos. SC000016-17). The '674 Patent also notes that "modification of this method and device can become clear to a [POSITA]. Such modifications are clearly covered by this disclosure." (Id. at 18).

As with the first contested claim term, "locking system" as utilized and defined in the claims does not indicate that the patentee intended to give the term any idiosyncratic meaning. This element leans in favor of this Court to interpret claim

³While "locking assembly" is described in the specification, the term "locking system" only appears in claims 1, 9, and 16. (ECF No. 80 at 31).

term two in the ordinary meaning. Because “locking system” does not appear in the specification the Court now proceeds to review the prosecution history.

As discussed for claim term 1, the argument to narrow claim terms 1 and 2 rests solely on whether Plaintiff Bain’s statements during the ‘674 Patent’s prosecution “unequivocally disavowed a certain meaning” for the invention to receive a patent. (ECF No. 104 at 1).⁴

Defendants focus on how Plaintiff Bain traverses DiBartolomeo to support their argument to narrow the construction of “locking system.” (ECF Nos. 80 at 32-33; ECF No. 79 at 102-03) (Bates Nos. SC000121-22). In pertinent part, Plaintiff Bain’s response to the Examiner was as follows: “[a]pplicant does disclose a device in which a solenoid (184) is present. Applicant’s solenoid (184) has a solenoid pin (186) which operates a strike plate (188) and permits the strike plate (188) to enter or leave the locking aperture (158). Thus, applicant’s ‘pushback system’ has significant structural differences from DiBartolomeo.” (Id. at 103) (Bates No.

⁴ “[F]or prosecution disclaimer to attach, . . . the alleged disavowing actions or statements made during prosecution [must] be both clear and unmistakable.” Omega Eng’g., Inc. v. Raytek Corp., 334 F.3d 1314, 1325-26 (Fed. Cir. 2003). It is required that “the alleged disavowing statements to be both so clear as to show reasonable clarity and deliberateness,” and “so unmistakable as to be unambiguous evidence of disclaimer.” Id. at 1325 (citations omitted).

SC000122). Defendants urge the Court to interpret the paragraph above as “clearly and unambiguously” disclaiming the broader term “locking system” and encourage the Court to utilize a version of Plaintiff Bain’s description in the above paragraph for the term’s construction: “a device having a solenoid and a strike plate, where the solenoid activates the strike plate to enter or leave a locking aperture.”

This section of the prosecution history as applied to claim term 2 presents a closer call for this Court. As noted above, the paragraph does appear to describe the specifics of the locking system at first, going into detail to explain how the solenoid is of the type with a pin and strike plate combination that enables the “locking” function with the locking aperture. (ECF No. 79 at 103) (Bates No. SC 000122). However, the final sentence of that paragraph seems to attribute this description as an explanation of the “significant structural differences” of the push-back mechanism vis-à-vis DiBartolomeo. (Id.) (Bates No. SC000122).

The Court finds that this paragraph is not so “unambiguous” and “clear” to be considered a disclaimer. The description above could equally be in reference to the “locking system” as a whole or to the “push-back mechanism” specifically. “Where an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.”

3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1326 (Fed. Cir. 2013).

Going beyond the alleged language of the disclaimer itself, the Court looks at the Examiner's rejection for context. The Examiner's rejection related to Bartolomeo based on its "teaching a dispensing system comprising a locking assembly that includes a pushback mechanism 222 that removes receiving latch 510 from docking port 210 (see Figures 1, 2 and 5) for the purpose of selectively removing wheeled devices 104 from the dispenser." (ECF No. 79 at 135) (Bates No. 000093). The Examiner puts Plaintiff Bain on notice not just that he or she believed the locking system was at issue, but that DiBartolomeo taught a "pushback mechanism" with a latch and docking port structure. Plaintiff Bain overcame that rejection with the description of the solenoid with a pin and strike plate, and as noted above it appears Plaintiff Bain tied these structures to the "push-back mechanism" that differentiated the invention from prior art. (Id. at 243).

Precedent urges the Court to be mindful of relying too heavily on prosecution history because it "represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317. The Court finds here

that the language Defendants point to as a “clear and unambiguous” disclaimer lacks such clarity and thus is less useful for the Court in this instance, especially in light of the clarity of the claim term in the context of the ’674 Patent itself. Therefore, the statements made by Plaintiff Bain during prosecution as it relates to the “locking system” are not so clear and unambiguous for the doctrine of prosecution disclaimer to attach.

In addition, Defendants’ desired construction puts emphasis on the device having a solenoid, but the aspect of the solenoid cannot be a vital distinguishing factor because Bartolomeo also uses a solenoid in its cart docking system. (ECF No. 104 at 4); see also (ECF No. 79 at 242) (the “Detailed Description of the Invention” of Bartolomeo). Thus, the elements of a strike plate and aperture appear to be the features of note for the push-back mechanism specifically as part of the “locking system” as a whole. (ECF No. 79 at 103) (Bates No. SC 000122). Even so, within the context of the entire ’674 Patent, the only appearance of a solenoid and strike plate is in the preferred embodiment: the Abstract nor the Summary of the Invention describe either element. (ECF No. 86 at 17-18). Such context is important because the Court must not cabin a ’674 Patent to a preferred embodiment: “although [a] specification often describes very specific embodiments of the invention, we have

repeatedly warned against confining the claims to those embodiments. In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” Phillips, 415 F.3d at 1323. These facts weigh against Defendants’ interpretation of the claim term.

When intrinsic evidence does not provide sufficient clarity, the Court is authorized “to rely on extrinsic evidence, which consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Phillips, 415 F.3d at 1330 (internal citations and quotations omitted). The Parties in this case have included extrinsic evidence such as testimony from an expert, Dr. Gary J. Novak, and dictionary entries. The Court will review each in turn.

i. Dictionary Definitions

Plaintiffs assert that there are dictionary definitions that define “lock” in several ways but none “requir[e]” a solenoid or strike plate. (ECF No. 79 at 20). Here, the dictionary definitions of “lock” do not contradict the function and description provided in the ’674 Patent documents. While the definitions do not necessarily resolve the issue of claim construction on this term, such evidence does not weigh against Plaintiffs’ construction.

ii. Expert Testimony

Defendants assert that based on the description of the "locking system" in the specification, a POSITA like Dr. Novak would understand the locking system to be limited to the distinctive features noted in the prosecution of the '674 Patent. (ECF No. 80 at 33). In reviewing Dr. Novak's declaration, Dr. Novak simply states that a POSITA would find Plaintiff Bain's statements during prosecution to be a disclaimer and provides no additional analysis as to why the "locking system" should be limited. (ECF No. 80 at 417-18). In this particular instance, Dr. Novak testified at the Markman hearing and was cross examined. (ECF No. 101 at 96). Dr. Novak noted that the ordinary meaning of "locking system" is an all-encompassing definition that would not be able to guide a POSITA as to what particular structure is being utilized in a device that would fall into that category. (Id. at 98). Dr. Novak does not discuss the claim terms specifically or any other aspect of the '674 Patent itself, but instead asserts that the prosecution history would be the recommended section for the development of his understanding of the term "locking system." (Id.).

Dr. Novak's cross examination on the alleged disclaimer is illuminating. During cross examination, he stated that section of prosecution history was

distinguishing the operation of Bain's device, invention from the DiBartolomeo's invention. Thus, applicant's push-back system has significant structural differences. And so we're talking about the solenoid, the strike plate, the strike plate entering or leaving the locking aperture. That's, again, I agree with you, the wheels aren't guided, plus we have a different locking mechanism or push-back system.

(Id. at 118) (emphasis added). He also stated that "the arrangement of the lock, locking components, or the push-back mechanisms or whatever we want to call it, those parts are clearly called out and distinguished between the two." (Id. at 117). Thus, even his testimony describing the alleged disclaimer does not render a clear and unambiguous understanding between the push-back mechanism and locking system. Thus, the Court is less inclined to rely on this extrinsic evidence to weigh in favor of finding a "clear" and "unambiguous" disclaimer.

Further, during cross examination, Dr. Novak stated "had the requirement for the solenoid and strike plate not been addressed in the prosecution history, there probably would not have been an issue with regard to a more general description of the meaning of ["solenoid" and "strike plate"], but in light of the specific identification of significant features and the exclusion of the features described in DiBartolomeo, it becomes clear that just describing those terms in general terms without

recognizing the limitations put on in the file prosecution would . . . not [help a POSITA to] understand the scope of the term[.]” (Id. at 118-19). The cross examination also emphasized that the descriptive terms (solenoid and strike plate) appeared in dependent, non-asserted claims and were illustrated in the preferred embodiment. (Id. 115-19). The Court understands that

extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.

Phillips, 415 F.3d at 1318. For the claim term of “locking system,” the expert testimony does not fulfill the above purposes; rather it emphasizes the need to find a disclaimer where the Court does not see one. Given that extrinsic evidence “in general” is “less reliable than the patent and its prosecution history in determining how to read claim terms,” this Court does not find the extrinsic evidence to weigh in favor of Defendants’ proposed construction. (Id.).

The Court concludes that Plaintiffs’ construction is most consistent with the claim-terms themselves, the language within the specification, and the invention as a whole, and rejects

Defendants proposed addition of “[a] device having a solenoid and a strike plate, where the solenoid activates the strike plate to enter or leave a locking aperture” as adding an additional limitation not otherwise specified or intended by the inventor. The Plaintiffs’ construction is “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention.” In re Papst, 778 F.3d at 1261.

3. Push-back Mechanism

<u>Claim Term</u>	<u>Plaintiffs’ Construction</u>	<u>Defendants’ Construction</u>
“Push-back mechanism”	A “spring-loaded mechanism.”	“A spring loaded mechanism for ejecting the wheel device a short distance from the docking port.”

a. The Parties’ Positions

The Parties agree that this term’s construction should include the descriptor of “spring-loaded mechanism.” (ECF No. 79 at 21).

i. Plaintiffs’ Position

Plaintiffs believe that the term is clear on its face and that the push-back mechanism is simply the means by which the

invention releases the stroller and that ejecting a stroller is one possible embodiment. (Id. at 21-22). Plaintiffs assert that Defendants are again adding in limitations from non-asserted, dependent claims (claims 6 and 14), especially because the independent claims (1 and 9) "permit" the receiving latch to be "releasably contained" and allow the wheeled device "to be removed from the docking port." (Id. at 22). The ejection function is only described within the narrower description of the preferred embodiment, which Plaintiffs assert only strengthens the presumption of claim differentiation for this term. (Id. at 23).

ii. Defendants' Position

Defendants assert that proper construction of this term requires the functional language of "ejecting" to be inserted so as to embody the context of how the push-back mechanism is used in the claims and specification. (ECF No. 80 at 13). The push-back mechanism was described in functional terms to "eject" a wheeled device "a short distance . . . to indicate that the dispensing cycle . . . was completed." (Id. at 14-15) (citing '674 Patent language, Figures 2 and 9, and the provisional application). The "spring-loaded" descriptor that both Parties agree on is not sufficient alone because according to Defendants a POSITA would not necessarily understand the function of the

"push-back mechanism" as described in the '674 Patent. (Id. at 16).

iii. Plaintiffs' Response

Plaintiffs note that there is more than one push-back mechanism included in the '674 Patent: the broader description of the push-back mechanism reflects the spring-loaded mechanism labeled 188 permitting the receiving latch 156 to be removed from the docking port 180, whereas the ejection function is described when the figures show the push-back mechanism 240, which ejects the wheeled device, as part of the latch assembly 150. (ECF No. 86 at 24-26). Aside from confusing the functions of the differing push-back mechanisms, Plaintiffs note that adding such functional language into the permissive release claims would conflict with the prohibition of mixing method steps in device claims. (Id. at 23) (citing IPXL Holdings, LLC v. Amazon.com, Inc., 430 F.3d 1377, 1384 (Fed. Cir. 2005)).

Further, Plaintiffs assert that Plaintiff Bain intended the push-back mechanism to be a release function, not ejection, and that the provisional application did not even mention the term push-back mechanism. (Id. at 25-26). Plaintiffs argue that while the provisional applications can be considered in claim construction, just as inventor testimony, in this instance neither of these sources are required for understanding this

term and therefore the provisional application should not be used to interpret the claim term. (Id.).

iv. Defendants' Response

First, Defendants note that apparatus claims can include functional limitations without triggering a means plus function interpretation pursuant to 35 U.S.C. § 112. (ECF No. 85 at 6 n.2) (citing Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1347-49 (Fed. Cir. 2015)). Defendants argue that, despite Plaintiffs' citations to the Summary and Abstract, that there is only one structure that corresponds to the push-back term, reflected in Figure 9 (204). (Id. at 7). Defendants also note that because there is no description in the '674 Patent of any push-back mechanism that performs the functional claim language ("permitting the receiving latch releasably contained to be removed from the docking port") the interpretation proposed by Plaintiffs would be invalid under pre-AIA 35 U.S.C. § 112, ¶ 1. (Id. at 7-8) (citing Synthes USA, LLC v. Spinal Kinetics, Inc., 734 F.3d 1332, 1344-45 (Fed. Cir. 2013)). Defendants argue that this language does not make clear whether the push-back mechanism or the docking port member is permitting the receiving latch removal, but that the specification indicates that the release function is associated with the docking port and that the push-back mechanism's sole function is to eject the wheeled

device, thus making their construction the correct interpretation of the claim term. (Id. at 8-9).

v. Defendants' Post Hearing Letter

Defendants' further assert that the inclusion of a spring as part of a lock does not substitute for a separate "push-back mechanism." (ECF No. 105 at 2). Defendants note that the Plaintiffs failed to distinguish releasing the strike plate and pushing back a wheeled device and argue that the "push-back mechanism" must be separate from the component that pushes on the strike plate. (Id.). Whereas Plaintiffs argue that there were two push-back mechanisms covered in the '674 Patent, Defendants note that while there are two spring-loaded mechanisms, one is part of a lock that would have been covered by the DiBartolomeo patent. (Id. at 2-3). Defendants assert that to equate any spring-loaded structure to be a "push-back mechanism" would impermissibly expand the claim scope to include most types of locks and would read in DiBartolomeo, the patent that Plaintiff Bain had to overcome during the '674 Patent's prosecution. (Id. at 3).

b. Discussion

The Court finds that, for the reasons articulated below as applied to claim-term 3, the plain and ordinary meaning of the claim-term should be construed as the Parties' have agreed to be

a "spring-loaded mechanism," and no further construction is warranted.

The independent claims at issue are claims 1, 9, and 16. (ECF No. 79 at 57-59). Claim 1 states in pertinent part: "1. A dispensing system for at least one wheeled device comprising: . . . (g) the first docking port member having a push-back mechanism thereby permitting the receiving latch releasably contained to be removed from the docking port." Claim 9 states: "9. The method of claim 8 further comprising: . . . (a) at least the first docking port member or the second docking port member of the plurality of docking ports having a push-back mechanism thereby permitting the receiving latch to be removed from the docking port." (ECF No. 57-8).⁵ Both of these claims explicitly state the function of the push-back mechanism to be permissive in the release of the receiving latch. As Plaintiffs have noted repeatedly, the dependent claims do narrow this function to an ejection method: "6. The dispensing system of claim 5 further comprising: . . . (b) the push-back device serving to separate the wheeled device from the docking port." However, as Plaintiffs have argued, the narrowing of claims from the independent to the dependent claims create a rebuttable presumption of claim differentiation. Defendants' arguments do

⁵ Claim 16 has the same language as claims 1 and 9 and will not be repeated here for brevity.

not overcome this presumption based on the clear meaning of the claim term as used and defined in the claims. Phillips, 415 F.3d at 1315. Defendants do not provide an alternative explanation as to why the ejection limitation is found in the dependent claims but not in the corresponding independent claim. Defendants simply assert that the independent claim requires the functional language of “ejecting” to be inserted so as to embody the context of how the push-back mechanism is used. (ECF No. 80 at 13). However, “[i]n such a setting, where the limitation that is sought to be ‘read into’ an independent claim already appears in a dependent claim, the doctrine of claim differentiation is at its strongest.” Liebel-Flarsheim Co., 358 F.3d at 910.

Looking to the specification, Defendants argue that understanding “spring-loaded mechanism” to be both the mechanisms (188) and (240) in Figures 8, 9, 10, and 11 would impermissibly broaden the scope to incorporate all kinds of spring-loaded mechanisms. But as Plaintiffs noted and the Court reiterates here, the push-back mechanism must be understood with the consideration of the totality of the ‘674 Patent and not simply one figure or embodiment. Phillips, 415 F.3d at 1313; see also Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998); Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the

ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history."). The Court must be cautious to avoid confining the claims to the specific embodiments in the specification, especially in circumstances like this where only one preferred embodiment is provided by the '674 Patent. Phillips, 415 F.3d at 1323; see also Nazomi Communications, Inc. v. ARM Holdings, PLC, 403 F.3d 1364, 1369 (Fed. Cir. 2005) (claims may embrace "different subject matter than is illustrated in the specific embodiments in the specification"); Liebel-Flarsheim, 358 F.3d at 906-08; Teleflex, 299 F.3d at 1327; SRI Int'l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121 (Fed. Cir. 1985); Gemstar-TV Guide, 383 F.3d at 1366. As discussed further below, the spring-loaded mechanism (188) represents the "push-back mechanism" described in the independent claims, and the spring-loaded mechanism (240) is the embodiment of the ejection feature described in the preferred embodiment.

Push-back mechanism (188) reflects the function of the broader, independent claims, is described in the Abstract and Summary of the Invention,⁶ and is the mechanism that is described

⁶ Defendants argue to the Court that the provisional application demonstrates that mechanism (240) is the push-back mechanism because the only "spring-loaded mechanism" described in the provisional application relates to mechanism (240) and its

by Plaintiff Bain in explaining his push-back mechanism in comparison to DiBartolomeo (as explained further below), that involves the spring-loaded strike plate (188), docking port (180), and receiving latch (156). (ECF No. 86 at 24-26). These specific elements have been the elements of focus because this is the patentable function. The ejection function, which is only in the dependent claims, appears in the preferred embodiment and Figure 9, showing a push-back mechanism (240) that provides the ejection of the wheeled device. This is distinguishable from the specification because the spring-loaded mechanism 240 is not present in the docking port member (where the spring-loaded mechanism 188 is located, near the solenoid, which is where the independent claims describe the releasability function being located in claim 1(g)) and instead part of the latch attached to the wheeled device (claim 18(e) and (g)).

ejection function. (ECF No. 80 at 15, 162) (Bates No. SC000194). It is further noted that the spring-loaded mechanism in the provisional application is located on the cart receiver mechanism, which again aligns with mechanism (240) in the final patent. The provisional application never uses the term push-back mechanism. While it is true that no other spring-loaded mechanism is described in the provisional application, the function of permissive release of the carts is described at the beginning of the proposed invention's description. The overall description provided in the provisional application follows closely with the ultimate preferred embodiment that was part of the final '674 Patent. This leads the Court to believe that the provisional application does not support Defendants' proposed construction.

(Id. at 26); see also (ECF No. 79 at 53 Fig. 10, 57-58).⁷ Thus, the structure of the specification further supports Plaintiffs' construction and is supported by the layout of the independent and dependent claims.

Next, the Parties do not argue in this instance that the prosecution history shows any disclaimer language related to the claim term "push-back mechanism," but the prosecution history is instructive for this claim term. As discussed above with claim terms 1 and 2, the push-back mechanism is discussed in the prosecution history to overcome the rejection of the Examiner in light of DiBartolomeo that is comprised of "a locking assembly that includes a pushback mechanism 222 that removes receiving latch 510 from docking port 210 . . . for the purpose of selectively removing wheeled devices 104 from the dispenser." (ECF No. 79 at 135). Plaintiff Bain overcame this rejection by explaining that

DiBartolomeo's pushback mechanism differs significantly from that of applicant. In DiBartolomeo, hoses (220) connect to solenoid (310). The plunger (312) of solenoid (310) is pivotally attached to the latch bar (302). Latch bar (302) has notch (304) which secures rearward bar (510) which

⁷ To illustrate, looking at dependent claim 18 describing the dispensing system: (e) the push-back device serving to separate the wheeled device from the first docking port member; (i.e. 240), and (g) the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired; (i.e. 188). Subpart (g) describes the permissive unlocking feature, whereas (e) describes an ejection feature.

is mounted on the back of cart (520). When the solenoid (310) is activated, it pushes down on latch bar (302) which pivots upward so that bar (510) is placed under notch (304). In contrast, . . . [a]pplicant does disclose a device in which a solenoid (184) is present. Applicant's solenoid (184) has a solenoid pin (186) which operates a strike plate (188) and permits the strike plate (188) to enter or leave the locking aperture (158). Thus, applicant's 'pushback system' has significant structural differences from DiBartolomeo

such that it allows for the receiving latch or bar to be the sole connection to the docking port for receiving and removal and allowing the wheeled device's wheels to remain unlocked. (Id. at 163-64). Moreover, it directly addresses the strike plate (188) and solenoid device (184, 186), as applicant's "pushback system" which further supports Plaintiffs' construction.

The description of the '674 Patent's solenoid and its ability to connect the receiving latch to the docking port is instructive to the Court's understanding of the claim term because it again demonstrates the releasability of the receiving latch. The description that "[a]pplicant's solenoid (184) has a solenoid pin (186) which operates a strike plate (188) and permits the strike plate (188) to enter or leave the locking aperture (158)," specifically allows for the strike plate as part of the connection between the docking port and receiving latch to "enter or leave" the locking aperture. It does not

require that motion to be one of force, or a motion that requires anything but the aperture to move.

Defendants further assert that the “push-back mechanism” as is in the patent would be invalid under pre-AIA 35 U.S.C. § 112 which provides that “[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same.” 35 U.S.C. § 112 ¶ 1; see also Crown Packaging Tech., Inc. v Belvac Prod. Mach., Inc., No. 6:18-cv-70, 2022 WL 821441 at *77 (W.D. Va. Mar. 17, 2022). Thus, the question under pre-AIA 35 U.S.C. § 112 is a question of indefiniteness. The indefiniteness analysis looks to how “a skilled artisan would understand the inherent parameters of the invention” based on the scope of the claim in light of the specification at the time the patent application was filed. Biosig Instruments, Inc. v. Nautilus, Inc., 783 F.3d 1374, 1387 (Fed. Cir. 2015); Dow Chem. Co. v. Nova Chems. Corp., 809 F.3d 1223, 1224 (Fed. Cir. 2005). Indefiniteness, while a question of law, can only be determined at the summary judgment stage if there is no genuine factual dispute underlying the legal question. See Bombardier Recreational Prods. Inc. v. Arctic Cat Inc., 785 Fed. App'x 858, 867 (Fed. Cir. 2019).

The Court need not address indefiniteness now because the claims, in light of the specification and description of the preferred embodiment, provide sufficient information to understand what the invention is. As discussed extensively above, *supra* page 60, the push-back mechanism is distinguished by its location as described in the claim language and in the corresponding figure. See claim 18 (g) (the solenoid pin operating a strike plate to permit the strike plate to enter or leave the locking aperture as desired, describing a permissive unlocking feature; ECF No. 79 at 53 Fig. 10, showing that specific mechanism (188)).

Turning to extrinsic forms of evidence, Defendants' expert believes that the construction of "push-back mechanism" or "spring-loaded mechanism" must incorporate the ejection feature described in the specification and points to Figure 9 and the spring loaded mechanism (240), which as the Court explained above, is not the mechanism described in the independent claims ((188), claims 1, 9, 16, describing permissive release), but in the preferred embodiment and dependent claims ((240), claim 18(e), describing ejection).⁸ In the testimony Dr. Novak

⁸ Further, the spring-loaded mechanism 240 is part of the latch attached to the wheeled device, versus in the docking port member, where the spring-loaded mechanism 188 is located, near the solenoid, which is where the independent claims describe the releasability function being located in claim 1(g).

provided during the Markman hearing, he reiterated that his understanding of the "push-back mechanism" was informed by the specific part number, which he identified as (240). (ECF No. 101 at 99). When Dr. Novak was shown the figure at the hearing, he discussed that the "applicant's push-back system has significant structural differences. And so we're talking about the solenoid, the strike plate, the strike plate entering or leaving the locking aperture. That's, again, I agree with you, the wheels aren't guided, plus we have a different locking mechanism or push-back system." (Id. at 118). As discussed above, the solenoid, strike plate, and locking aperture structures are what create the release function, which do not include (240), but instead includes (188). Therefore, the expert testimony regarding the push-back mechanism does not even address the specific structure that the claim term at issue describes. The Court does not find it persuasive.

Ultimately, "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter." Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 910 (2014) (quoting Minerals Separation v. Hyde, 242 U.S. 261, 270 (1916) (internal quotations omitted)). The analysis "must take into account the inherent limitations of language" and because "[s]ome modicum of uncertainty . . . is the 'price of ensuring the appropriate incentives for

innovation.'" Id. at 909 (quoting Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 732 (2002)).

Therefore, the claim terms need only be as clear and exact as is "reasonable," and the Court finds that the push-back mechanism, as described in the claims and specification, in light of the principles of claim differentiation and its preferred embodiment, is reasonably clear to inform a POSITA of what the invention is.

The court should apply the principle that "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." In re Papst, 778 F.3d at 1261. The Court concludes that Plaintiffs' construction is most consistent with the claim-terms themselves, the language within the specification, and the invention as a whole, and rejects Defendants proposed addition of "[a] spring loaded mechanism for ejecting the wheel device a short distance from the docking port" as adding an additional limitation not otherwise specified or intended by the inventor.

4. Branch arm(s)

<u>Claim Term</u>	<u>Plaintiffs' Construction</u>	<u>Defendants' Construction</u>
"Branch arm(s) "	Plain and ordinary meaning, but if construction is required, "docking station."	"Portions of the main raceway extending outward from the main arm."

a. The Parties' Positions

i. Plaintiffs' Position

Plaintiffs assert that the plain and ordinary meaning of "branch arm" is sufficient and "[a]bsent disclaimer or lexicography, the plain meaning of the claim" should control. (ECF No. 79 at 24-25) (citing Toshiba v. Imation Corp., 681 F.3d 1358, 1369 (Fed. Cir. 2012)). The claim language specifically describes "branch arms" as having "the locking system," attached to it and it "providing a cart raceway" which "serve[s] to guide the wheeled device into or out of the dispensing system." (Id. at 25). Plaintiffs further assert that the term "branch arm(s)" is only used in the context of the preferred embodiment and are defined broadly to allow for various configurations. (Id. at 26).

Plaintiffs argue that Defendants' proposed construction adds words that will muddle a factfinder's understanding of the claim and that the limiting descriptor of "extending outward" is another attempt at inserting dependent claim language into the independent claims (dependent claims 2 and 10, including the phrase "extending therefrom"). (Id. at 25-26).

ii. Defendants' Position

Defendants argue that their construction closely aligns with the claim structure and specification and points out that converting "branch arm" to "docking station" as suggested as an alternative by Plaintiffs would eliminate "branch arm" as a distinct claim element and effectively collapse the term into the definition of the "main arm." (ECF No. 80 at 5).

Defendants assert that the branch arms are consistently described in the various claims as "extending from the main arm" and that their construction of "branch arm" enables the factfinder to have a better understanding of the specifications and descriptions given the "many inconsistencies" Defendants found in the '674 Patent. (Id. 5-7). Defendants point to Plaintiff Bain's deposition to illustrate, where Plaintiff Bain gave conflicting interpretations of what defines the "branch arm" as a distinct element and whether it can be distinguished by its physical appearance or purpose. (Id. at 8-10) (Plaintiff Bain discussing branch arms extending from the main arm of the

raceway with the unique function of being able to attach a docking station, in contrast Plaintiff Bain describing the main arm as possibly including a docking station, which, according to Defendants, would render the claim term superfluous.).

Defendants further argue that dictionaries support their construction of "branch arm" which is commonly understood to be a structure that extends or projects from or into a main part. (Id. at 11).

Defendants refute Plaintiffs' alternative proposed construction, "docking station," as being a simpler or clearer term to interpret in relation to the '674 Patent because it is disconnected from the '674 Patent's descriptions and embodiment, adds a third term that utilizes the word "docking" to differentiate, and the '674 Patent lacks a definition for the term "station." (Id. at 12-13).

iii. Plaintiffs' Response

Plaintiffs state that the dispute regarding "branch arms" is not centered on what the term actually means, but whether the branch arms must "extend[] outward from the main arm." (ECF No. 86 at 28). Plaintiffs note that the asserted claims 1 and 9 do not acknowledge the extension or position of the branch arms at all; only dependent claims 2 and 10 expressly include the limitation of "extending" from the main arm. (Id.). Plaintiffs argue that Defendants' interpretation would render the dependent

claims duplicative. Moreover, the specification explicitly discloses that the branch arms can be configured in any position relative to the main arm. (Id. at 29). The specification notes that the design is purposefully flexible to allow for the invention to fit in any desired configuration based on the space available to remove or attach wheeled devices. (Id. at 30).

Plaintiff maintains that the term does not need further construction but offers “docking station” as the closest synonym to branch arm. (Id. at 31). Plaintiff asserts that prior art (Grams) utilizes docking station to describe a similar structure that incorporates the cart guide, wheel locks, and wiring where the ‘674 Patent’s structure houses the cart guide, locking assembly, and wiring. (Id.).

iv. Defendants’ Response

Defendants argue that, while the independent words “branch” and “arm” are common words, together they form a phrase that is a term that is not bound by the common ordinary meaning of its parts in this context. (ECF No. 85 at 1). Defendants see “branch arm” as a “coined term” which requires construction to determine how a POSITA should understand the term in light of the context of the overall patent. (Id. at 2). “Idiosyncratic language . . . or terms coined by the inventor are best understood by reference to the specification.” (Id.) (citing Phillips v. AWH Corp., 415 F.3d 1303, 1315 (Fed. Cir. 2005)).

Defendants insist that because the scope of a claim term is at issue, such claim term must be construed. (Id.) (citing O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008)). Defendants argue that even with the description that Plaintiffs provide of the term, the description itself is nothing more than additional limitations that are also undefined and require construction and provide no concrete way to distinguish the term from others, such as "main arm." (Id. at 3).

Defendants note that their proposed construction does not interfere with dependent claims 2, 8, or 10 and if it did, "claim differentiation is a rule of thumb that does not trump the clear import of the specification," and therefore should not impact Defendants' construction. (Id. at 4-5) (citing Edwards Lifesciences LLC v. Cook Inc., 582 F.3d 1322, 1332 (Fed. Cir. 2009)). Defendants insist that it does not contend that the claims are limited to the specific embodiment that is outlined in the '674 Patent, but that based on the intrinsic and extrinsic evidence, the branch arms should be construed in line with the embodiment where the branch arms are considered portions of the main raceway extending outward from the main arm. (Id. at 6).

v. Defendants' Post Hearing Letter

Defendants assert that the branch arms must be separate structural elements that project in a different path from the main arm because without a "branch arm" structure, the structures formed from it would not exist. (ECF No. 105 at 3). Specifically, a branch arm "provides" the cart raceway according to the '674 Patent claims. (Id.). Defendants further assert that claim differentiation does not preclude their construction of "branch arm" because claim 1 does not specify whether both branch arms must be directly connected to the main arm of the main raceway. (Id.) (emphasis added). This is made clear by claim 2: "the main raceway having a main arm with each member of the at least two branch arms extending therefrom." (Id. at 3-4).

b. Discussion

The Court finds that, for the reasons articulated below as applied to claim-term 4, the plain and ordinary meaning of the claim-term would be readily accessible to a POSITA, and no further construction is warranted.

A court should give words of a claim their ordinary meaning in the context of the claim and the whole patent document, and in this case the plain and ordinary understanding of "branch arm" is unambiguous. As Plaintiffs asserted, the claim language sufficiently describes "branch arms" as a structure having "the

locking system," attached to it and it "providing a cart raceway" which "serve[s] to guide the wheeled device into or out of the dispensing system." (ECF No. 79 at 25). Further, the asserted claims 1 and 9 do not acknowledge the extension or position of the branch arms at all; only dependent claims 2 and 10 expressly include the limitation of "extending" from the main arm, which creates a rebuttable presumption of claim differentiation that Defendants' arguments do not overcome. Liebel-Flarsheim Co., 358 F.3d at 910.

However, the Court agrees with Defendants that the branch arms must exist as a separate structure from the "main arm" in order to provide for the location of the locking system and provide the cart raceway, (ECF No. 105 at 3) and agrees with Defendants that the proposed alternative claim term "docking station" would increase confusion in context with the other terms of the '674 Patent because it would add a third term that utilizes the word "docking" to differentiate among the other "docking" elements of the '674 Patent, and the '674 Patent lacks a definition for the term "station." (ECF No. 80 at 12-13).

The Court believes that the common understanding of "branch" is sufficient to incorporate this understanding: "a narrow extension of a larger area, mass or group," "a slender part of a structure, machine, or an instrument projecting from a main part, axis, or fulcrum," "a long thin part of an object

that sticks out from the main part," "something that extends from or enters into a main body or source," "a slender projection." (ECF No. 80 at 72, 84, 101) (showing definitions of "arm" and "branch" from various open-source dictionaries); compare independent claim 1 "A dispensing system for at least one wheeled device comprising: . . . (i) the main raceway having a main arm and at least two branch arms," and dependent claim 2 "The dispensing system of claim 1 further comprising: (a) the main raceway having a main arm with each member of the at least two branch arms extending therefrom."

While the Court lists dictionary definitions here, it is not to clarify the term, but to illustrate the general understanding of the term "branch arm" is consistent with the claim term's meaning as the '674 Patent intended, although dictionary definitions are permissible extrinsic evidence that the Court can use to clarify claim terms when claim terms are ambiguous. We find here that the ordinary meaning of claim language as understood by a person of skill in the art is readily apparent from the claim language, and so claim construction for this term involves little more than the application of the widely accepted meaning of a commonly understood word. Brown v. 3M, 265 F.3d 1349, 1352 (Fed Cir. 2001) (holding that the claims did "not require elaborate interpretation"). "In such circumstances, general purpose

dictionaries may be helpful.” Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005). The Court does not find that this term is a “coined term” with an idiosyncratic meaning specific to the ’674 Patent. (ECF No. 85 at 2). Therefore, this evidence weighs in favor of Plaintiffs’ construction.

The specification demonstrates the meaning of “branch arm” is intended to be the common understanding in the ’674 Patent. Looking at the description of the preferred embodiments, the branch arms are described as “extending” from “the main arm” which corresponds to the design seen in Figure 1 showing a main column with slender parts projecting from the main structure where the wheeled devices are to be docked. (ECF No. 79 at 44, 56). This further supports Plaintiffs’ construction of claim term 4.

Next, the prosecution history does not show any disclaimer language related to the claim term “branch arm.” Therefore, this evidence weighs in favor of Plaintiff’s construction.

“In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.” Vitronics, 90 F.3d at 1583. Therefore, the Court will not consider any of the extrinsic evidence presented by both sides related to this claim term, as the intrinsic evidence

is sufficient to determine that “branch arm” should be constructed pursuant to its ordinary meaning.

As instructed in previous decisions, the Court should apply the principle that “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” In re Papst, 778 F.3d at 1261 (citing Phillips, 415 F.3d at 1312–17). The Court concludes that Plaintiffs’ construction is most consistent with the claim-terms themselves, the language within the specification, and the invention as a whole, and rejects Defendants proposed addition of “[p]ortions of the main raceway extending outward from the main arm” as adding an additional limitation not otherwise specified or intended by the inventor.

5. Cart raceway

<u>Claim Term</u>	<u>Plaintiffs’ Construction</u>	<u>Defendants’ Construction</u>
“Cart raceway”	Plain and ordinary meaning, but if construction is required, “cart guide.”	Indefinite; otherwise, “a space created by the branch arms.”

a. The Parties’ Positions

i. Plaintiffs’ Position

Plaintiffs assert that the description of the cart raceway adequately encompasses the necessary information for a factfinder: "serving to guide the wheeled device into or out of the dispensing system," and "part of the branch arm," and "part of the docking port member" (a subpart of the branch arm). (ECF No. 79 at 28). Plaintiffs believe that the term is sufficiently defined by where it is and what it does. (Id.).

Plaintiffs believe that Defendants are confusing the "guide plates" with the branch arms of the embodiment in Figure 3. (Id. at 28-29).

ii. Defendants' Position

Defendants argue that "cart raceway" is used in a contradictory manner in the '674 Patent, rendering the term indefinite. (ECF No. 80 at 19). In the alternative, Defendants argue that the construction should be "a space created by the branch arms." (Id.). Defendants assert that the claims (1, 9, and 16) do not provide a structure to define the "cart raceway"; instead it is solely defined by the purpose of "[guiding] the wheeled device into or out of the dispensing system," and as the location where the receiving latch enters the docking port. (Id. at 21-22). Defendants point to various claims that attempt to define the location of the "cart raceway" as being "provided" by one or "at least two" branch arms. (Id. at 21).

Defendants argue that the figures that reference the cart raceway do not provide any additional clarity: Figure 1, 2, and 3 all claim to show the cart raceway as reference character 132 pointing at differing places and spaces. (Id. at 21-24).

Defendants claim that in Plaintiff Bain's testimony he pointed to a space between two points on the cart receiving device other than the branch arms or docking port members as described in the '674 Patent. (Id. 25-26). Defendants argue that these differing descriptions would fail to sufficiently inform a POSITA about the scope of the claims with reasonable certainty, which should result in the claim being rendered indefinite.

(Id. at 25) (citing Nautilus at 2129; Berkheimer v. HP Inc., 881 F.3d 1360, 1363-64 (Fed. Cir. 2018); and Interval Licensing LLC v. AOL, Inc., 766 F.3d 1364, 1372 (Fed. Cir. 2014)).

Defendants assert that if the claim term is not found indefinite, that the claim language should require that the cart raceway be provided by at least two branch arms or the first docking port member or the second docking port member of at least two branch arms to comport with the specifications. (Id. at 27). Defendants argue that Plaintiffs' alternative construction of "cart guide" does not ameliorate the lack of understanding of exactly where the cart raceway is supposed to exist and instead "recite a function that appears immediately

after the disputed claim term, and thus add[ing] nothing to an understanding of the term.” (Id.).

iii. Plaintiffs’ Response

Plaintiffs argue that Defendants’ indefiniteness argument is improper because it was not disclosed pursuant to L. Civ. R. 9.3; L. Pat. R. 3.3(d) (requiring “Invalidity Contentions” to be served no later than 45 days after the service of the “Disclosure of Asserted Claims and Infringement Contentions” containing any grounds of invalidity based on 35 U.S.C. § 101 or indefiniteness under 35 U.S.C. §112(b) of any of the asserted claims, which requires a detailed explanation of the bases for the asserted grounds). Plaintiffs argue that Defendants did not provide a detailed description of the grounds for indefiniteness and instead relied on impermissible, barebones boilerplate to attempt to preserve their right to assert indefiniteness arguments later in the proceedings. (ECF No. 86 at 33).

Even if the Court were to find grounds to assess Defendants’ assertion of indefiniteness, Plaintiffs argue that it is a low bar to meet the definiteness standard, and that the term “cart raceway” would be sufficient to inform a POSITA, via the specification and prosecution history, with reasonable certainty of the scope of the invention. (Id. at 32, 34) (citing Nautilus, 572 U.S. at 910; Guangdong Alison Hi-Tech Co. v. ITC, 936 F.3d 1353, 1359 (Fed. Cir. 2019)). Plaintiffs

insist that the claim language locates the cart raceway as part of the branch arm that functions to guide the wheeled device. (Id. at 34). Plaintiffs further assert that, so long as the function is apparent from the claims and specification, the term is definite per Federal Circuit precedent: “[functional language] promotes definiteness because it helps bound the scope of the claims by specifying the operations that the [claimed invention] must undertake.” Nevro Corp. v. Bos. Sci. Corp., 955 F.3d 35, 39 (Fed. Cir. 2020) (quoting Cox Communs., Inc. v. Sprint Commun. Co. LP, 838 F.3d 1224, 1232 (Fed. Cir. 2016)). (Id. at 35-36).

Plaintiffs argue that Defendants’ assertion that the cart raceway is located between branch arms is incorrect in that the cart raceway is designed to guide the wheeled device on and off the individual branch arms that contain docking ports. (Id. at 38). Plaintiffs point to figures 3 and 4 to show that the space, ostensibly the cart raceway, is created between guide plates that enables the removal and receipt of wheeled devices. (Id. at 39). Plaintiffs believe that, if construction is required, cart guide would be the next best term to encompass the function: “a means for providing guidance for the stroller to enter the port.” (Id. at 40) (citing Plaintiff Bain’s testimony, Dkt. 80-2, 63:15-16).

iv. Defendants' Response

Defendants assert that if Plaintiffs wanted to define the cart raceway solely by its function, the term should have been identified as a means plus function term earlier in the litigation. (ECF No. 85 at 9). Aside from this point, Defendants note that Plaintiffs' construction of the term in their Opening Markman Brief ("a guide, part of the branch arm, to receive the stroller") demonstrates that the term is not susceptible to a construction that is consistent with the disclosure in the '674 Patent because the relevant language in claims 1 and 9 are inconsistent with that construction. Independent claims 1 and 9 state that "at least two branch arms provid[e] a cart raceway for the main raceway." (Id. at 10). Defendants argue that the disagreement the Parties have over understanding Figure 3 demonstrates the difficulty in understanding what, exactly, represents the cart raceway even if one agrees that it is a space rather than an actual physical structure. (Id. at 11).

b. Discussion

i. Indefiniteness

Defendants primarily argue for claim term 5 to be declared indefinite. The approach of reviewing for indefiniteness does have the same foundations as construction analysis; however

there are several important factors that caution courts against deciding indefiniteness prior to summary judgment.

First, indefiniteness is proven when “an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim” based on the intrinsic evidence or knowledge of the relevant art area. Halliburton Energy Servs., Inc., v. M-I LLC, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008). This is a high burden of proof that would be difficult to meet at this early stage. Second, only one party has offered expert testimony to support an indefiniteness argument, but expert testimony is often helpful in this task. Phillips, 415 F.3d at 1318. Third, a Markman hearing is meant to give meaning to a claim, whereas indefiniteness invalidates the patent claims entirely. Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1376 (Fed. Cir. 2001) (abrogated in part by Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898 (2014) on alternative grounds related to the “insolubly ambiguous” analysis). Thus, the Court could defer the indefiniteness arguments until summary judgment. See, e.g., Intergraph Hardware Techs. Co. v. Toshiba Corp., 508 F. Supp. 2d 752, 773 n.3 (N.D. Cal. 2007) (“[The] indefiniteness argument is inappropriate at the claim construction stage.”); Pharmastem Therapeutics, Inc. v. Viacell Inc., 2003 U.S. Dist. LEXIS 877, at *2 n. 1 (D. Del. Jan. 13, 2003) (“[T]he court will

not address the defendants' indefiniteness argument at [the Markman hearing]."). The Federal Circuit in Halliburton, Exxon, and Datamize reviewed courts that dismissed the case for indefiniteness at summary judgment, not at a prior Markman hearing. Halliburton, 514 F.3d at 1249; Exxon, 265 F.3d at 1373; Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005) (abrogated in part by Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898 (2014) on alternative grounds related to the "insolubly ambiguous" analysis).

Determining the indefiniteness of claim language is a question of law "that is drawn from the court's performance of its duty as the construer of patent claims[,] and the same duty applies to a Markman hearing. Exxon, 265 F.3d at 1373. However, this does not outweigh the previous practical considerations that militate against determining indefiniteness prior to the end of fact or expert discovery. Therefore, as long as the claims are "amenable to construction, however difficult that task may be[,] the Court will construe them here. Id. at 1375.

The Court's constructions here will be made without prejudice to Defendants' ability through dispositive motions to challenge the validity of the patents based on lack of written description or indefiniteness under 35 U.S.C. §112.

ii. Construction

The first step of construction is to review the claim in its ordinary meaning in the context of the claim itself and the whole patent document. In claim 1, the first mention of the term appears in subsection (k): "the at least two branch arms providing a cart raceway for the main raceway". (ECF No. 79 at 57) (Bates No. SC000016). Claim 9(e) and 16(m) describes the cart raceway as: "the first docking port member or the second docking port member of the at least two branch arms providing a cart raceway". (Id. at 58) (Bates No. SC000017). Looking at just the two claims that describe the cart raceway specifically, there is dissonance between the description in claim 1 and claims 9 and 16. In claim 1, it appears that the branch arms themselves are providing the boundaries for a cart raceway, similar to the lines in a parking lot giving boundaries for a car to park in. In claims 9 and 16, it reads that at least an individual docking port member of at least two branch arms provide for the cart raceway, suggesting that the cart raceway is at the location of at least one docking port member. The docking port member is located on the branch arm, as claim 15(a) describes: "the main arm of the dispensing system with each member of the at least two branch arms having at least first docking port member and the second docking member from one or both sides of the raceway in order to facilitate convenient

positioning of carts . . .” (Id.). Thus, if the docking port member is located on the branch arm itself, the branch arms cannot be the “boundaries” of a cart raceway that is provided for by the individual docking port member.

As Defendants have argued, the clarity of the term raceway leaves much to be desired as the Court proceeds through the dependent claims, which often uses the term “raceway” without any modifier. For example, claim 7: “The dispensing system of claim 6 further comprising: a) the main arm of the dispensing system and the at least two branch arms having docking ports on one or both sides of the raceway in order to facilitate convenient positioning of carts or to change the cart volume within a given space.” (Id.). While this is not the picture of clarity, the Court reads this “raceway” as likely referring to the “main raceway” rather than the cart raceway based on the context of subsection b) of the claim: “the docking ports having from a top view thereof in at least one layout selected from the group consisting of a linear structure, an L-shape, a T-shape, and an angled shape,” suggesting that this claim is referencing the overall structure of the invention rather than the specific subpart that is ostensibly the cart raceway. (Id.).

Plaintiffs argue that the plain meaning of the term should control, but cart raceway is not necessarily a common phrase in the context of a cart dispensing system. Plaintiffs further

suggest that if definition is required, that "cart guide" be used. This suggestion further demonstrates that "cart raceway" is not a commonly understood pattern, word, or space because "cart raceway" itself does not indicate its function as a "cart guide." The "raceway" phraseology is particularly muddled given that the common English meanings of various "ways" when relating to wheeled devices such as parkway, where cars are driven, versus driveway, where cars are parked. In both of those contexts, the positioning of the wheeled devices are based on parallel lines or boundaries, which would align with Defendants' perspective of the claim term and comport with claim 1, but would be at odds with claims 9 and 16.

Therefore, the Court finds that the claims themselves are not sufficient alone to define the claim term.

Next, the Court turns to the specification and prosecution history to further the understanding of the claim meaning in context. The prosecution history does not address the claim term "cart raceway" at all. (Id. at 160-64) (Bates Nos. SC000118 - SC000122), which leaves the Court to examine the specification.

The specification does describe the cart raceway in the preferred embodiment. (Id. at 56) (Bates No. SC000015). The cart raceway is described as "[w]ithin each of the branch arms 130 is the locking assembly 120, which connects wheeled device

110 thereto. Each branch arm 130 provides a cart raceway 132 to receive a wheeled device 110.” (Id.). This description appears to align with claim 1’s description of the cart raceway being defined by two branch arms in the first sentence, but the second sentence is ambiguous. The descriptor “each branch arm” could mean singular branch arms provide the cart raceway to a wheeled device, or it could be in reference to “each of the branch arms” (plural) in the first clause.

Similar to the vague use of “raceway” in the claims, the term “raceway” without specification is used in the preferred embodiment which is imprecise, but context indicates that these instances describe the “cart raceway” rather than the “main raceway” due to the described placement of the “raceway”: “[a]s receiving latch 156 at raceway 132 enters a docking port 180, the docking port 180 holds the receiving latch 156 therein at locking aperture 158,” and “[i]n this manner, each wheeled device 110 may be removably accepted into the raceway at its docking port 180 by a receiver apparatus such as a latch assembly 150 built into the wheeled device 110 to engage and controllably guide in the docking of the wheeled device 110 being received.” (Id.). From the claims above, it appears that the preferred embodiment from the specification aligns with claims 9 and 16 but is inconsistent with claim term 1.

The Specification does not clarify the claims and in fact seems to support the contradictory nature between claim 1 and claims 9 and 16.

Now the Court turns to the figures to garner any additional clarity. The figures that show the "cart raceway" are Figures 1, 2, 3, and 7. Plaintiffs identify label 132 as the "cart raceway." (Id. at 28). Defendants show that label 182 in Figure 7 is also considered the cart raceway according to Plaintiff Bain in his deposition testimony. (ECF No. 80 at 25-26). Figures 1 and 2 show a perspective from above of the wheeled devices aligned with the individual branch arms labelled 1-8. (Id. at 44-45) (Bates Nos. SC000002-3). In Figure 1, 182 points to the space next to the right of branch arm 2, which could be interpreted as "in between" branch arms 2 and 4, and roughly support the description of the cart raceway in claim 1. (Id. at 44) (Bates No. SC000003). In Figure 2, label 132 is pointing to the main raceway. (Id. at 45) (Bates No. SC000004). Figure 3 labels 132 as a space between docking port 180 and the guide plates 160. (Id. at 46) (Bates No. SC000005). Figure 3 is described as depicting a perspective of the unassembled view of the locking assembly for the dispensing system. (Id. at 55) (Bates No. SC000014). Figure 7 also shows an arial view from a different perspective of the same assembly in Figure 3, and 182 is shown pointing to the same space that was labelled 132 in

Figure 3. (Id. at 50, 55) (Bates No. SC000009, SC 000014). The space shown in Figures 3 and 7 would comport with the description of the cart raceway in claims 9 and 16, where the docking ports at the end of the branch arm create the space that “guides” the cart’s locking mechanism into place for the locking and unlocking functions. Ultimately the figures do not bridge the gap between claim 1 and claims 9 and 16.

It is permissible, even if the meaning is plain on the face of the claim language for a patentee, by acting with sufficient clarity, to disclaim a plain meaning or prescribe a special definition. In re Papst, 778 F.3d at 1261. When a court finds a special definition or “a purely subjective phrase . . . [it] must determine whether the patent’s specification supplies some standard for measuring the scope of the phrase.” Waddington North Am., Inc. v. Sabert Corp., No. 09-4883, 2010 WL 4363137 at *9 (D.N.J. Oct. 27, 2010) (citing Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1351 (Fed. Cir. 2005)).

As discussed above, the plain and ordinary meaning of “cart raceway” is not clear based on common knowledge alone. The Court concludes Plaintiff Bain was being a lexicographer when creating the term “cart raceway” in the context of the ‘674 Patent. However, a clear, “special” or specific definition is not apparent within the context of the ‘674 Patent, as discussed above after reviewing the independent and dependent claims, the

specification, the preferred embodiment, and the figures. This term was not modified or addressed during patent prosecution, and there seems to be an inconsistency between the independent claims as to where the cart raceway is located and what structures define its bounds.

It is permissible for the Court to review extrinsic evidence such as expert testimony when the intrinsic evidence does not shed sufficient light on the claim terms. Phillips, 415 F.3d at 1314-17. "Extrinsic evidence consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman, 52 F.3d at 980.

Here, Defendants' expert notes that a POSITA would have difficulty construing what a "cart raceway" is due to the '674 Patent's inconsistent claims and figures. (ECF No. 80 at 24) ("Not only does the term fail to provide objective boundaries for the claims, the term is so unclear that a POSITA cannot even discern whether it refers to a structure or a space."). Dr. Novak further states that "[a] POSITA would understand that a structure is guided through contact with another structure, and not by an empty space. It is unclear, therefore, how a space in and of itself can guide one structure into or out of another." (ECF No. 80 at 421). Additionally, "[a] POSITA would understand the claims of the '674 patent indicate that the 'cart raceway'

is 'provided by,' and therefore defined by, the structures that create it, which are specified to be 'branch arms' or the 'docking port member' in the 'branch arms.'" (Id.).

Plaintiffs argue that the expert simply parrots the position of Defendants without support for all the claim terms. (ECF No. 104 at 5). The Court disagrees with Plaintiffs' interpretation with regards to claim term 5. In both Dr. Novak's declaration and testimony at the Markman hearing, Dr. Novak described the difficulties in assessing "cart raceway" from a POSITA's perspective through the specific claim descriptions and review of specific figures. For example, his testimony reflects the steps by which a POSITA would attempt to determine what a "cart raceway" is in light of the overall '674 Patent:

So, the cart raceway is a feature, again it's column 3, lines 45-49, the cart raceway is something that's provided by the branch arm and it has a function or purpose to receive a wheeled device, and a POSITA would then go to the patent drawings or other descriptions to find out where this branch arm is,

further "it's not clear whether the two arms collectively form a single cart raceway or whether each of the two arms provides a cart raceway," and

I think the specification and also the claim language indicates that the cart raceway is created by the branch arm. . . . Is it a structure, is it the structure shown in

Figure 2, or is it the space in Figure 3? And if it's the space in Figure 3, where does it begin, where does it end? Where does someone that's trying to understand -- every object on every structure has a boundary. And so to say that the boundary creates a raceway is meaningless -- it has no bounds.

(ECF No. 101, 110:16-21; 111:14-20; 101:11-24).

This is not simply "parroting" a position. Dr. Novak's testimony and declaration provides the perspective of a POSITA attempting to understand claim term, pointing to specific intrinsic evidence for his opinion. This is precisely what a Court must attempt to do when assessing claim terms. The Court is required to look to how "a skilled artisan would understand the inherent parameters of the invention" based on the scope of the claim in light of the specification at the time the patent application was filed. Biosig Instruments, Inc. v. Nautilus, Inc., 783 F.3d 1374, 1387 (Fed. Cir. 2015).

The fact that a POSITA found the term cart raceway to be indefinite and offers the definition that comports with claim 1 one as an alternative definition supports the Court's understanding that the inherent dissonance between claim terms 1, 9, and 16 is not resolved by the intrinsic evidence, and further is not resolved by the extrinsic evidence presented.

The Court is ultimately dissatisfied with both of the proposed constructions provided by the Parties. As Defendants

have argued, the term "cart raceway" itself is a term of art that is not readily apparent from the claims or the specification. (ECF No. 80 at 21-27). Defendants' proposed construction, "a space created by the branch arms," essentially reasserts only one of the three independent claims where the term appears (most closely aligned with claim 1) which conflicts with what the term is supposed to mean as described by the inventor and is also in conflict with other aspects of the specification and figures as discussed above. (Id. at 27). Plaintiffs' alternative definition, "cart guide" suffers from the same deficiencies as the original claim term. As Defendants have stated, "the only logical construction" of this claim term must come from the structures that create it. (Id. at 28).

As the Court has discussed above, the structures that create the cart raceway are the individual branch arm and the docking station on the one hand, and the guide plates on the opposite side of the locking assembly on the other: it is the space that is created by these structures coming into alignment. Thus, the construction that is most directly aligned with the '674 Patent's description, when taking into consideration the ambiguous independent claims and the specification and figures, inventor testimony, and the expert's declaration and testimony, would be "a cart raceway provided by the space between each side of the locking assembly located on each branch arm and matching

receiving wheeled device.” This incorporates the understanding from the independent claims 9 and 16 and clarifies that the space is generated not among the branch arms themselves, like the lines of a parking spot, as described in claim 1, but a component on each individual branch arm creating a space at each branch arm terminus in relation to its opposite on the wheeled device, specifically the space at the ends of the locking assembly. With this construction, the Court is applying the principle that “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” In re Papst, 778 F.3d at 1261.

CONCLUSION

The Court construes the claim-terms at issue as stated above. The parties will be directed to consult with the assigned Magistrate Judge to for the entry of an appropriate scheduling Order.

An appropriate Order consistent with this Opinion will be entered.

Date: February 28, 2023
At Camden, New Jersey

s/ Noel L. Hillman
NOEL.L. HILLMAN, U.S.D.J.